

ABSTRACT

A system accessing and transmitting different data frames in a digital transmission network, for accessing and transmitting different data frames, said system comprises: at least a user-network interface (UNI), which is used to couple with the subscriber's network; and/or at least a network-network interface (NNI), which is used to couple with said digital transmission network to transfer data; and a data converting device, coupled with said UNIs and said NNIs, which is used to convert data formats between said UNIs or data formats between said NNIs or data formats between said UNIs and said NNIs; said data converting device comprises a virtual bridge device and an interface device, said virtual bridge device switches data between said UNIs and said NNIs, and said virtual bridge device detects control messages, and transmits the control messages to control system of the device to process via the control interface unit; and data frames of message except control messages are switched, so as to overcome the limitation of address space of Ethernet data frames.